

Piezo Switch with Extended Protection against Vandalism



PSE M22 HI Embossed



PSE M22 HI Braille



PSE M22 HI VS

See below:

Approvals and Compliances

Description

- Momentary switch available in version Standard or with Lettering/Symbols Assembly by mounting with nut
- Quick connect terminals or wires

Characteristics

- Housing and actuating area material: high-quality stainless steel, optional aluminium anodized in various colours
- Laser lettering, embossed symbols, Braille, standard or customized characters and symbols
- High reliability, long lifetime with more than 20 mill. actuations
- piezo switch with enhanced vandal proof protection to IK 06 impact resistance rating
- For use in harsh environments, both indoors and outdoors (see technical data)

References

Alternative: Standard version

Weblinks

[html-datasheet](#), [General Product Information](#), [CAD-Drawings](#), [Product News](#), [Detailed request for product](#), [Microsite](#)

Technical Data

Electrical Data

Switching Function	N.O.
Switching Voltage	max. 42 / 60 VAC/DC
Switching Current	max. 100 mA
Rated Breaking Capacity	1 W
Lifetime	20 million actuations at Rated Switching Capacity
Switch Resistance OFF	> 10 MΩ
Switch Resistance ON	< 20 Ω
Capacity	30 pF
N.O. Closing Impulse Duration	20- 1000 ms depending on actuating force, time and speed
Contact Configuration	free polarity

Mechanical Data

Actuating Force	2 - 5 N
Actuating Travel	0.002 mm
Shock Protection	IK 06
Tightening Torque	2.5 Nm

Climatical Data

Operating Temperature	-20 to +60 °C
Storage Temperature	-20 to +60 °C
IP-Protection	IP 67 acc. to IEC 60529, IP 69K acc. to DIN 40050-9
Environmental Assessment	55°C / 93% r.h. acc. to DIN EN 60068-2-30
Salt Spray Test (acc. to DIN 50021-SS)	24 h / 48 h / 96 h Residence Time

Material

Housings	Stainless Steel
Actuating Area	Stainless Steel, Aluminium anodized for embossed symbols and Braille

Approvals and Compliances

Detailed information on product approvals, code requirements, usage instructions and detailed test conditions can be looked up in [Details about Approvals](#)

Approvals

Approval Reference Type:

Approval Logo	Certification Body	Description
		Fire Test according to DIN EN 81-71: stress class 1 + 2 (Elevators)
		MIL-STD Certificate Number: 416D Method RS103
		VDE Certificate Number: DIN EN 61000-4-2, DIN EN 61000-4-4

Application standards

Application standards where the product can be used

Organization	Design	Standard	Description
	Designed for applications acc.	IEC/UL 60950	IEC 60950-1 includes the basic requirements for the safety of information technology equipment.

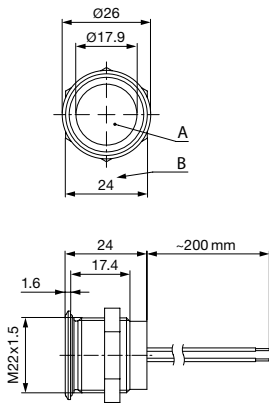
Compliances

The product complies with following Guide Lines

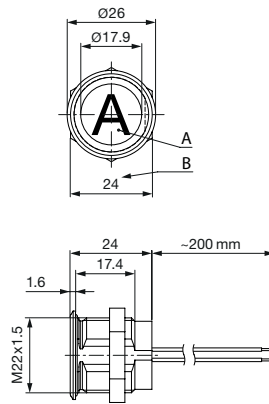
Identification	Details	Initiator	Description
	RoHS	SCHURTER AG	EU Directive RoHS 2011/65/EU
	REACH	SCHURTER AG	On 1 June 2007, Regulation (EC) No 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals 1 (abbreviated as "REACH") entered into force.

Dimension [mm]

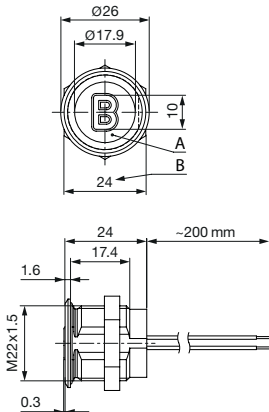
PSE M22 HI Standard with stranded wire (without anti-rotation)



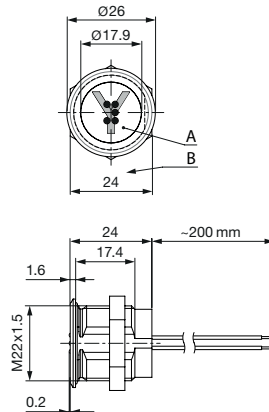
PSE M22 HI Laser marking with stranded wire (with anti-rotation)



PSE M22 HI Embossed marking with stranded wire (with anti-rotation)



PSE M22 HI Braille marking with stranded wire (with anti-rotation)



Either with/without embossed characters or symbols in various colors

With Braille and Laser marking in various colors

Legend:

A = Actuating area

B = Width across flats

- Wire (Standard: 0.14 mm² / 200 mm wire-length)

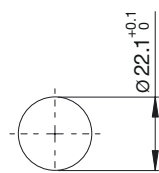
Lettering:

- Either with/without lettering

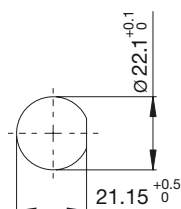
- Position of the connections with respect to the position of the lettering is not defined

Dimension

PSE M22 without anti-rotation



PSE M22 with anti-rotation



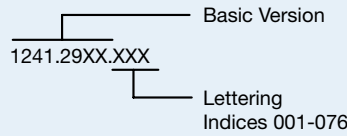
Lettering Colour of Laser Lettering

Material	Lettering Colour	
Stainless Steel	black	Filled letters
Aluminium	white	Filled letters

Ordering Example for Lettering

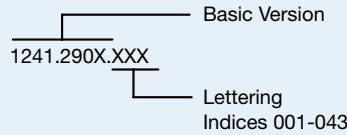
Laser marking	
The last three digits in the order number define the lettering:	
001-076	Standard Lettering
101-	Customized Lettering

Example for ordering with laser marking:



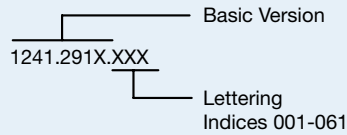
Embossed lettering	
The last three digits in the order number define the lettering:	
001-043	Standard Lettering
101-	Customized Lettering

Example for ordering with embossed lettering:



Braille lettering	
The last three digits in the order number define the lettering:	
001-061	Standard Lettering
101-	Customized Lettering

Example for ordering with Braille lettering



Order Index Lettering

Laser Marking			
001 = A	021 = U	041 = ÷	061 = EIN
002 = B	022 = V	042 = *	062 = AUS
003 = C	023 = W	043 = =	063 = AUF
004 = D	024 = X	044 = #	064 = AB
005 = E	025 = Y	045 = ↔	065 = ON
006 = F	026 = Z	046 = †	066 = OFF
007 = G	027 = 0	047 = →	067 = UP
008 = H	028 = 1	048 = ←	068 = DOWN
009 = I	029 = 2	049 = ↓	069 = HIGH
010 = J	030 = 3	050 = ↑	070 = LOW
011 = K	031 = 4	051 = %	071 = ON/OFF
012 = L	032 = 5	052 = √	072 = START
013 = M	033 = 6	053 = CTRL	073 = RESET
014 = N	034 = 7	054 = RETURN	074 = 
015 = O	035 = 8	055 = SHIFT	075 = 
016 = P	036 = 9	056 = LOCK	076 = 
017 = Q	037 = +	057 = STOP	077 = 
018 = R	038 = -	058 = ENTER	
019 = S	039 = .	059 = BACK	
020 = T	040 = x	060 = LINE	

Order Index Lettering

Erhabene Symbole /	Embossed Lettering	
000 = Dummy	017 = Q	034 = 7
001 = A	018 = R	035 = 8
002 = B	019 = S	036 = 9
003 = C	020 = T	037 =
004 = D	021 = U	038 = -
005 = E	022 = V	039 = ↑
006 = F	023 = W	040 = ↓
007 = G	024 = X	041 = ←
008 = H	025 = Y	042 = →
009 = I	026 = Z	043 = 
010 = J	027 = 0	
011 = K	028 = 1	
012 = L	029 = 2	
013 = M	030 = 3	
014 = N	031 = 4	
015 = O	032 = 5	
016 = P	033 = 6	

Order Index Lettering

Braille Marking			
001 = A =		017 = Q =	
002 = B =		018 = R =	
003 = C =		019 = S =	
004 = D =		020 = T =	
005 = E =		021 = U =	
006 = F =		022 = V =	
007 = G =		023 = W =	
008 = H =		024 = X =	
009 = I =		025 = Y =	
010 = J =		026 = Z =	
011 = K =		027 = 0 =	
012 = L =		028 = 1 =	
013 = M =		029 = 2 =	
014 = N =		030 = 3 =	
015 = O =		031 = 4 =	
016 = P =		032 = 5 =	
		033 = 6 =	
		034 = 7 =	
		035 = 8 =	
		036 = 9 =	
		037 = ß =	
		038 = ST =	
		039 = CH =	
		040 = SCH =	
		041 = EI =	
		042 = IE =	
		043 = Ä =	
		044 = Ö =	
		045 = Ü =	
		046 = AU =	
		047 = EU =	
		048 = ÄU =	
		049 = Zahlen- zeichen =	
		050 = . =	
		051 = : =	
		052 = , =	
		053 = ; =	
		054 = ? =	
		055 = ! =	
		056 = - =	
		057 = ' =	
		057 = 0 =	
		059 = „ =	
		060 = " =	
		061 = * =	

All Variants

Mounting Diameter [mm]	Terminal	Housing Material, Torsion Protection	Actuator area	Lettering	Config. Code	Order Number
22	Flexible wire	Stainless Steel ,yes	Alu red	embossed	PSE M 22 HI VS	1241.2903.002
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.028
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.041
22	Flexible wire	Stainless Steel ,yes	Alu green	embossed	PSE M 22 HI VS	1241.2904.042
22	Flexible wire	Stainless Steel ,yes	Alu natural	embossed	PSE M 22 HI VS	1241.2905.042
22	Flexible wire	Stainless Steel ,yes	Alu blue	bra / las	PSE M 22 HI VS	1241.2913.025
22	Flexible wire	Alu green ,yes	Alu green	laser printed	PSE M 22 HI VS	1241.2924.074
22	Flexible wire	Stainless Steel ,no	Stainless Steel	no	PSE M 22 HI ST	1241.3993

Legend:

Type:

HI = High Impact

VS = anti rotation protection for lettering

Nut with gasket are enclosed in the box.

The listed item numbers represent a selection of the range of piezo switches.

Other mounting diameters, materials, colors, connections and symbols are available on request.

Special materials for use in salt and chlorinated environment on request.

Availability for all products can be searched real-time: <https://www.schurter.com/en/Stock-Check/Stock-Check-SCHURTER>

Packaging unit 10 in box with insert



- Actuating elements in ESD safe packaging
- Screw nuts and sealing rings in a bag (enclosed in the box)

Accessories

Description



Connecting Terminal PSE
Connecting Terminal